Ex post evaluation – Uganda

**Sector:** Water supply - large systems, CRS Code 14021  
**Project:** Kampala Network Rehabilitation Programme (BMZ no. 2000 66 266)* (A)  
**Implementing agency:** National Water and Sewerage Corporation (NWSC)

### Ex post evaluation report: 2017

<table>
<thead>
<tr>
<th></th>
<th>(Planned)</th>
<th>(Actual)</th>
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<tbody>
<tr>
<td>Investment costs (total)</td>
<td>EUR million</td>
<td>4.0</td>
</tr>
<tr>
<td>Counterpart contribution</td>
<td>EUR million</td>
<td>0.7</td>
</tr>
<tr>
<td>Funding</td>
<td>EUR million</td>
<td>3.3</td>
</tr>
<tr>
<td>of which BMZ budget funds</td>
<td>EUR million</td>
<td>3.3</td>
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</table>

*) Random sample 2015

**Summary:**
The water distribution network in Kampala was rehabilitated on a selective basis by supplying and installing repair and replacement parts.

**Development objectives:**
The project's ultimate objective was to improve the conditions precedent for the successful commercialisation and privatisation of the water supply and sewage disposal in Uganda. The programme objective was the reduction of unaccounted for water (UfW) in the distribution network in Kampala to facilitate higher fee revenues for the executing agency (NWSC) through the sale of higher volumes of water.

**Target group:**
The combined resident and daytime population of the city of Kampala was the target group.

**Overall rating: 2 (Project A)**

**Rationale:** The project measures implemented enabled UfW to be reduced by around 5 million m³ of water, which was sold additionally each year from the financial year 2004/2005 onwards. This is equivalent in 2004 rates to additional income of around EUR 2.8 million p.a. or around 250,000 people who can be supplied additionally each day with per capita consumption of 60 litres. Soon after the project started, the ultimate objective lost its relevance in terms of privatisation. The (hitherto public) NWSC enterprise was commercialised in full.

**Highlights:** NWSC currently has an UfW level of 36%, whereas the initial figure in 2000 was 45%. The ongoing reduction after the project’s end was also achieved particularly because illegal connections are consistently sought out and eliminated, meters are checked at regular intervals of 3-6 years and replaced if necessary, and a dedicated division within NWSC also pursues the leak detection programme.
Rating according to DAC criteria

Overall rating: 2 (Project A)

Relevance

The project's ultimate objective was to improve the conditions precedent for the successful commercialisation and privatisation of the water supply and sewage disposal in Uganda. The project objectives were to reduce unaccounted for water (UfW) in the distribution network in Kampala and to facilitate higher fee revenues for NWSC by selling higher volumes of water. Kampala's population was the target group, especially the customers of NWSC and the private operator. The chain of effects is present and verifiable, even by today's standards.

From today's perspective, the ultimate objective of privatisation is no longer relevant, although the objective of commercialising the public enterprise is. The project-executing agency, the National Water and Sewerage Corporation (NWSC), is pursuing this objective within the scope of internally delegated management contracts. These are concluded firstly between the company head office and the water ministry, and secondly broken down between NWSC Head Office and the individual local water suppliers, with their compensation depending at least partly on certain performance indicators being achieved. Fundamentally, private sector participation may be the correct approach to solve the key problems. However, it is more important for a company to be managed from a commercial point of view, and for the state not to exercise any influence over day-to-day operations if it owns the company. This is the case for NWSC.

'Water and sanitation' has been and continues to be a key sector for German-Ugandan development cooperation. The project fitted in with this and was adjusted accordingly with Technical Cooperation (TC) measures and other donors' projects/programmes. The local supporting structures were used sensibly. Their further development was crucially supported by the TC in close coordination.

Relevance rating: 2

Effectiveness

The attainment of the project objectives defined at appraisal can be summarised as follows:

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Status PA, target value PA</th>
<th>Ex post evaluation</th>
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<tbody>
<tr>
<td>(3) Reduction of UfW (technical and non-technical) to 35%.</td>
<td>PA status: 50%  End of 2004 target: 35%</td>
<td>End of 2005 after implementation completion: 36%, in financial year 2014/2015: 32%  Target was largely achieved by the time that the project was concluded and is now fully met following the conclusion of further measures.</td>
</tr>
<tr>
<td>(2) The collection rate reaches 95%.</td>
<td>PA status: 80%  End of 2004 target: 95%</td>
<td>Target has been fully met.  (2005: 95%; 2014/2015: 98%)</td>
</tr>
<tr>
<td>(3) Outstanding accounts are not higher than the last three months’ cumulative sales revenues.</td>
<td>PA status: 5 months  End of 2004 target: 3 months</td>
<td>End of 2005: around 4.5 months  Target has been fully met since 2006.</td>
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</table>

An international utilities services provider executed the measures during the first two years of the project implementation. However, Ondeo did not manage to disburse the funds; instead, there was only around a 40% outflow of funds by the end of the management contract. The success in terms of reducing the level
of UfW was similarly low, as this was only reduced from around 47% to 45%. The UfW fell by 9 percentage points to 36% and water sales rose by around 5.2 million $m^3$ per year in the two years following the end of the management contract, in which NWSC executed the project measures under its own direction.

The indicators were too ambitious for a project with a very short duration and very low FC funds, and they could therefore not be achieved for the most part until after some delay and further investments. The project was nonetheless effective.

**Effectiveness rating:** 2

**Efficiency**

The project was efficient in terms of the results achieved with very limited project funds of around EUR 3.3 million. The rise in water sales resulted in NWSC receiving around EUR 2.8 million more per year in financial years 2004/05 and 2005/06. NWSC managed this primarily because network rehabilitation measures were implemented to a lesser extent. Instead, NWSC mainly concentrated on cutting illegal water connections and replacing or calibrating faulty or imprecise water meters.

The impacts in the area of allocation efficiency were also achieved with an appropriate use of funds. From the perspective of the evaluation mission, there would not have been any more favourable solution methods.

**Efficiency rating:** 2

**Overarching developmental impact**

No indicators were set during the PA for measuring attainment of the overall objective; instead, the overall objective is to be regarded as achieved if the project objectives are achieved. The water sold additionally each year from financial year 2004/2005 onwards – around 5 million $m^3$ – is equivalent in 2004 rates to additional income of around EUR 2.8 million p.a. or around 250,000 people, who can additionally be supplied each day with per capita consumption of 60 litres.

The project had a structural impact in that the NWSC employees became aware of the leak detection project's significance, meaning that this has been a fixed component in every NWSC branch office to date.

The successful commercialisation of NWSC within the scope of the internally delegated management contracts has since been replicated in other African countries and is considered a formula for success.

**Overarching developmental impact rating:** 2

**Sustainability**

NWSC currently has an UfW level of 32%, which is still high. The reduction was achieved primarily because illegal connections were consistently sought out and eliminated, meters were checked at regular intervals of 3-6 years and replaced if necessary, and a dedicated division within NWSC also pursued the leak detection programme. It is important for these leak detection efforts to be continued in the future as well.

At present, around 120% of NWSC's operating costs are covered and it generated around EUR 2.2 million in profit by 30 June 2014 after write-downs, taxes, interest payments and repayments of around EUR 7 million. However, the profit is not sufficient to cover all costs with an imputed return of 5%, or to finance extensive expansion and replacement investments. Although NWSC's business success has been sustainable for over 10 years now, it may be necessary in the future to adapt the strategy that is currently in use, as the expansion of the sewage disposal system will place financial burdens on the executing agency. In short, there is a decent starting point for sustainable operation without external financial assistance.

The situation regarding cost coverage is currently good.

Overall, we rate the sustainability as good.

**Sustainability rating:** 2
Notes on the methods used to evaluate project success (project rating)

Projects (and programmes) are evaluated on a six-point scale, the criteria being relevance, effectiveness, efficiency and overarching developmental impact. The ratings are also used to arrive at a final assessment of a project’s overall developmental efficacy. The scale is as follows:

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
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<tbody>
<tr>
<td>Level 1</td>
<td>Very good result that clearly exceeds expectations</td>
</tr>
<tr>
<td>Level 2</td>
<td>Good result, fully in line with expectations and without any significant shortcomings</td>
</tr>
<tr>
<td>Level 3</td>
<td>Satisfactory result – project falls short of expectations but the positive results dominate</td>
</tr>
<tr>
<td>Level 4</td>
<td>Unsatisfactory result – significantly below expectations, with negative results dominating despite discernible positive results</td>
</tr>
<tr>
<td>Level 5</td>
<td>Clearly inadequate result – despite some positive partial results, the negative results clearly dominate</td>
</tr>
<tr>
<td>Level 6</td>
<td>The project has no impact or the situation has actually deteriorated</td>
</tr>
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Rating levels 1-3 denote a positive assessment or successful project while rating levels 4-6 denote a negative assessment.

**Sustainability is evaluated according to the following four-point scale:**

Sustainability level 1 (very good sustainability): The developmental efficacy of the project (positive to date) is very likely to continue undiminished or even increase.

Sustainability level 2 (good sustainability): The developmental efficacy of the project (positive to date) is very likely to decline only minimally but remain positive overall. (This is what can normally be expected).

Sustainability level 3 (satisfactory sustainability): The developmental efficacy of the project (positive to date) is very likely to decline significantly but remain positive overall. This rating is also assigned if the sustainability of a project is considered inadequate up to the time of the ex post evaluation but is very likely to evolve positively so that the project will ultimately achieve positive developmental efficacy.

Sustainability level 4 (inadequate sustainability): The developmental efficacy of the project is inadequate up to the time of the ex post evaluation and is very unlikely to improve. This rating is also assigned if the sustainability that has been positively evaluated to date is very likely to deteriorate severely and no longer meet the level 3 criteria.

The overall rating on the six-point scale is compiled from a weighting of all five individual criteria as appropriate to the project in question. Rating levels 1-3 of the overall rating denote a “successful” project while rating levels 4-6 denote an “unsuccessful” project. It should be noted that a project can generally be considered developmentally “successful” only if the achievement of the project objective (“effectiveness”), the impact on the overall objective (“overarching developmental impact”) and the sustainability are rated at least “satisfactory” (level 3).